YPLSF
1.3

MAY 15 1987

HW-113

John Littler, Manager
Hazardous Waste Cleanup Program
Washington Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504

Re: Yakima Agricultural Research Laboratory Closure Plan

Dear Mr. Littler:

This letter is in response to the January 12, 1987, Plan Amendment and Revision of the Closure Plan for the Pesticide Disposal Drainfield at the U.S. Department of Agriculture's Yakima Agriculture Research Laboratory. As you know, this site is being handled under the Resource Conservation and Recovery Act (RCRA) closure program and is listed as a National Priority List (NPL) site under the Superfund program. The purpose of this letter is to provide Environmental Protection Agency (EPA) comments on the closure plan and to describe how RCRA and Superfund program authorities will be applied to this site.

The RCRA and Superfund programs have both reviewed the closure plan. To comply with the RCRA requirements of a closure plan, the existing plan must be modified to include the additional requirements as outlined in Enclosure A. The existing closure plan is more of a RCRA Facility Assessment (RFA) than a closure plan. The closure plan must be in compliance with the requirements of 40 CFR Part 265 Subpart G prior to issuance of a public notice.

There are three possible options the facility may pursue at this point. First, the existing closure plan could be called an RFA or Preliminary Assessment/Site Inspection (PA/SI) and be completed prior to development of an actual closure plan. The second option would be to amend the existing plan to meet all the 40 CFR Part 265 Subpart G requirements before the public notice is issued. A third option would be to call the existing closure plan Phase I. The Phase I closure plan would develop the data to be used in implementation of Phase II or actual closure of the unit. The Phase I plan must address the 40 CFR Part 265 Subpart G requirements but in less detail than that provided in Phase II. Phase I must also discuss the options to be considered in Phase II depending on the extent of contamination discovered during Phase I.

In any case, the Washington Department of Ecology (Ecology) should consider the RCRA and Superfund programs' technical comments of the existing closure plan. These are listed in Enclosure B.

Kimberly Anderson of Ecology addressed in her January 7, 1987, letter to Robert Dolphin, Director of Yakima Agricultural Research Laboratory, the delisting of the site from the NPL. It is too soon for the Superfund program to make a determination whether other actions will be necessary at the facility. The results of the closure plan monitoring effort must be evaluated before such a decision is made. EPA review of the data may indicate that additional sampling or monitoring be required. The closure plan acknowledges on pages 10 and 14 that additional sampling may be necessary.

For your information, below is a brief description of the delisting process. Enclosed please find the exhibit of Completion and Deletion Process of sites from the NPL. More information can be obtained in the EPA draft guidance on Deletion of Sites from the NPL, dated September 16, 1986.

For a site to be delisted from the NPL, EPA must determine that the remedy at a site, or the decision that no further response action is appropriate, is protective of human health and the environment. Specifically, the technical documentation (the Remedial Investigation/Feasibility Study, or its equivalent) for the site must demonstrate that:

1. Ground water has met applicable or relevant and appropriate requirements and does not pose a threat to human and environmental receptors or that controls/treatment achieve the degree of cleanup or protection specified in the Record of Decision/Enforcement Decision Document and outlined in the ground water protection strategy for the classification of affected ground water.

2. Soils/waste do not affect the achievement of cleanup objectives specified for other environmental media (e.g., ground water, surface water, air) and that the direct contact threat is at an acceptable risk.

3. Air emissions are protective of public health and the environment as defined in Section 112 and the 1977 Clean Air Act amendments for primary and secondary major criteria pollutants.

4. Operation and Maintenance specified for the site is guaranteed by the state or potentially responsible party and is sufficient to maintain the effectiveness of the source control remedy and performance objective.

5. Institutional controls necessary for the effective performance of the remedy are in place.

6. Other enforceable measures necessary to protect public health and the environment are in place.

It is possible that the RCRA documentation will be adequate to evaluate the above criteria, particularly if a complete RCRA closure plan is implemented. If not, additional sampling and monitoring may be required (as mentioned above) through the Superfund remedial program.

Thank you for giving EPA an opportunity to comment on the Yakima Agricultural Research Laboratory Pesticide Disposal Drainfield Closure Plan. Please forward copies of the data resulting from the sampling required by the closure plan to Lori Cohen, EPA Superfund Branch, and Bill Adams, EPA RCRA program. At that time, EPA will continue to work with Ecology to evaluate the data and determine what, if any, additional actions will be required by EPA at the site.

Thank you.

Sincerely,

Charles E. Findley, Director
Hazardous Waste Division

Enclosures

cc: Marsha Beery, Ecology (Olympia)
Kimberly Anderson, Ecology (Yakima)

bcc: Jim Pankanin (EPA)
Bill Adams (EPA)
L.Reynolds CJG 2/5/87 8505P

	CONCURRENCES							
SYMBOL		JE	MB for					
SURNAME	COHEN	EVERTS	RICE	MILLAM				

ENCLOSURE A

General Closure Requirements

1. For partial or final closure the plan must identify the steps necessary to close the unit. The steps required to close must be broken down in sufficient detail such that:

   a) the closure process is understandable;
   b) a closure schedule can be developed; and
   c) quantities and unit prices can be developed for closure cost estimation.

2. The closure plan should provide an estimate of the maximum inventory of hazardous wastes on-site or disposed of in the unit and a detailed description of the methods to be used for removing, decontaminating equipment and system components, transporting, treating, storing, or disposing of all hazardous wastes.

3. The closure plan must include an estimate of the expected year of final closure.

4. Unless an exemption is granted, the waste must be treated, removed from the site or removed within 90 days after receiving approval of the closure plan. Closure must be completed within 180 days after approval of the closure plan.

5. The plan must specify that within 30 days of completion of closure the owner/operator will submit certification that the unit has been closed in accordance with the approved closure plan.

6. The closure plan must indicate the location and dimensions of any waste disposal units with respect to permanently surveyed benchmarks.

7. The closure plan must contain a detailed estimate, in current dollars, of the cost of closing the facility in accordance with the requirements of 40 CFR Part 265.

8. The closure plan must outline the criteria and methods to be used to judge the success of the decontamination and removal efforts.

9. Groundwater monitoring per 40 CFR Part 265 Subpart F must be included. Technical comments are given in Enclosure B. In any event, the standards of Part 265 must be met, including provisions for assessment monitoring should contamination be discovered.

ENCLOSURE B

Technical Comments on Yakima Agricultural Research Laboratory Closure Plan

1. Page 3--Facility History. When was the previous septic tank and drainfield system installed? The closure plan states the pesticide disposal system was a modification to an existing septic tank and drainfield system. Yakima Agricultural Research Laboratory (YARL) must provide information regarding the disposal and spills of hazardous waste from late 1920 to 1961, before EPA's final assessment of the site.

2a. Page 5--Monitoring Well Installation. The compressor air for the air rotary drilling rig should be filtered to prevent introducing oil into the wells.

2b. The rationale for the multiple (nested) piezometers is confusing, it is not clear if YARL is discussing two different water bearing zones, (1) 10 feet or less and (2) 50 feet. A qualified geologist, not the well driller, should make the necessary field judgment on the zones which will be monitored. If multiple piezometers are installed, then all the multiple piezometers should be completed in the same aquifer. If it is necessary to monitor the lower aquifer, this monitoring point should be complete in a separate borehole.

2c. When surveying for both horizontal and vertical control for the piezometers, it should be surveyed to a known benchmark or reference point (e.g., USGS, county, city, state...).

2d. Dennis Erickson of Ecology has recommended that the upgradient well be located within 50 feet of the drainfield in order to better characterize the groundwater flow direction. YARL would likely prefer to locate the upgradient well further away in the northwest corner of the site to ensure a clean background sample. A single upgradient well does not account for spatial variability of groundwater quality and increases the risk of incorrect indication of contamination. YARL may want to consider installing two upgradient wells, one within 50 feet and one further away, in order to satisfy all these needs.

3. Page 8--Monitoring and Sampling. YARL should clearly state that all sampling and analytical procedures will comply with the appropriate methods described in the EPA manual SW-846, Test Methods for Evaluating Solid Waste.

4a. Page 14--Soil Core Sampling. Per 40 CFR 265.112(c), YARL should state that any subsequent amendments to the closure plan shall be submitted in writing to Ecology within 60 days after an unexpected event has occurred which has affected the closure plan.

4b. More detail needs to be provided in the soil sampling section of the closure plan. YARL should explain how the location of the drain tile will be determined prior to the soil sampling. It is stated on page 14 that the soil sampling methodology will be similar to the handling of the water samples. YARL needs to provide specific information regarding the sampling procedures, methods used to prevent

cross-contamination between samples, and decontamination of sampling equipment. YARL should again consult with the SW-846 manual for acceptable procedures.

4c. Since certain volatile solvents are being analyzed in the soil samples, plastic bags are unacceptable soil containers. Clean, airtight glass containers should be utilized.

4d. The reference on page 15 to the National Oil and Hazardous Substances Contingency Plan (NCP) is incorrect. It should be the National Priority List (NPL). YARL should also state that final closure will be in compliance with the RCRA requirements of 40 CFR 265 Subpart G.

5. Page 16--Post Closure. Regarding the contingent post closure plans, YARL should clearly state that it will comply with all applicable state and federal hazardous waste regulations with respect to waste handling, treatment and/or disposal.

6. Figure 3. The monitoring well design diagram lacks the following information:

- No mention of a bottom cap; sump/sediment trap
- Filter pack--2 feet or less above screen
- What lies above the ground--bentonite seal (annular seal)?